Complete Summary

GUIDELINE TITLE

Recommendations to improve preconception health and health care - United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care.

BIBLIOGRAPHIC SOURCE(S)

Johnson K, Posner SF, Biermann J, Cordero JF, Atrash HK, Parker CS, Boulet S, Curtis MG, CDC/ATSDR Preconception Care Work Group, Select Panel on Preconception Care. Recommendations to improve preconception health and health care--United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. MMWR Recomm Rep 2006 Apr 21;55(RR-6):1-23. [195 references] PubMed

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Preconception health

GUIDELINE CATEGORY

Counseling
Prevention
Risk Assessment
Screening

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Obstetrics and Gynecology
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Health Care Providers
Nurses
Patients
Physicians
Public Health Departments

GUIDELINE OBJECTIVE(S)

To provide recommendations to improve both preconception health and care

TARGET POPULATION

Women of child-bearing age and their partners

INTERVENTIONS AND PRACTICES CONSIDERED

1. Ensuring individual responsibility across the lifespan concerning reproductive plans
2. Ensuring consumer awareness of the importance of preconception health behaviors and care
3. Preventive visits incorporating risk assessment and couseling
4. Providing interventions for identified risks
5. Interconception care for women with prior adverse pregnancy outcomes
6. Prepregnancy checkup
7. Ensuring health insurance coverage for women with low incomes
8. Establishing public health programs and strategies
9. Monitoring improvements though public health surveillance

MAJOR OUTCOMES CONSIDERED

- Pregnancy outcomes
- Birth outcomes
- Maternal and infant health

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Various databases (e.g., PubMed®) were searched to identify published studies for review. Search parameters included preconception care, birth outcomes, reproductive health, and women's health. The reports were reviewed by the Select Panel on Preconception Care (SPPC) of specialists.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus (Committee)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Delphi)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The recommendations were developed through the collaborative efforts of the Centers for Disease Control and Prevention (CDC) and external partners to 1) target life stages in reproductive-aged women; 2) encourage special interest groups to collaborate to achieve common goals; 3) encourage scientific and public health collaboration; and 4) address health impact, public health systems, efficiency, and effectiveness.

During 2003, a review of studies published regarding maternal and child health and preconception care was conducted by CDC to assess preconception care. The CDC work group also discussed opportunities for collaboration across programs.

Several CDC programs in the work group had previously identified specific interventions with scientific evidence which, if delivered before conception, would promote preconception health and improve pregnancy-related outcomes. These programs recognized the need to integrate these interventions with similar

services to improve coverage, effectiveness, access, efficiency, and ultimately maternal and infant pregnancy outcomes. The need for preconception health promotion and care was identified as a critical public health topic by CDC and partners. As a result, a broader working group of national organizations involved in preconception health issues were established (see Appendix in the original guideline document).

In November 2004, the CDC work group and representatives of 16 external organizations discussed the evidence supporting preconception care to determine the steps that can be taken to develop national recommendations. The consensus of the participants was that a larger meeting on preconception care and an interdisciplinary panel of specialists should be convened in 2005. A steering committee and planning committee were established (including representatives from CDC and external partners) to plan for a national summit and to bring together a group of specialists with experience in data, practice, and policy issues related to preconception health.

In June 2005, a national summit on preconception care was convened to gather information concerning promising practice models. The summit agenda was developed based on 68 submitted abstracts and reflected various preconception project models, finance approaches, and research questions.

In conjunction with the summit, CDC convened the Select Panel on Preconception Care (SPPC), which included various subject matter specialists and representatives from national organizations concerned about the health of women, infants, and families. A Delphi technique was used to identify subject matter specialists to serve on SPPC. SPPC discussed recommendations regarding clinical practice, public health/community programs, research/data, and policy/finance.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Initial recommendations were sent to the Centers for Disease Control and Prevention (CDC) work group, panel members, and additional subject matter specialists from academic and professional backgrounds for comment and review. Reviewers shared their comments in writing or as part of a series of conference

calls convened by the Select Panel of Preconception Care (SPPC) steering committee.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Recommendation 1. Individual Responsibility Across the Lifespan. Each woman, man, and couple should be encouraged to have a reproductive life plan.

Recommendation 2. Consumer Awareness. Increase public awareness of the importance of preconception health behaviors and preconception care services by using information and tools appropriate across various ages; literacy, including health literacy; and cultural/linguistic contexts.

Recommendation 3. Preventive Visits. As a part of primary care visits, provide risk assessment and educational and health promotion counseling to all women of childbearing age to reduce reproductive risks and improve pregnancy outcomes.

Recommendation 4. Interventions for Identified Risks. Increase the proportion of women who receive interventions as follow-up to preconception risk screening, focusing on high priority interventions (i.e., those with evidence of effectiveness and greatest potential impact).

Recommendation 5. Interconception Care. Use the interconception period to provide additional intensive interventions to women who have had a previous pregnancy that ended in an adverse outcome (i.e., infant death, fetal loss, birth defects, low birthweight, or preterm birth).

Recommendation 6. Prepregnancy Checkup. Offer, as a component of maternity care, one prepregnancy visit for couples and persons planning pregnancy.

Recommendation 7. Health Insurance Coverage for Women with Low Incomes. Increase public and private health insurance coverage for women with low incomes to improve access to preventive women's health and preconception and interconception care.

Recommendation 8. Public Health Programs and Strategies. Integrate components of preconception health into existing local public health and related programs, including emphasis on interconception interventions for women with previous adverse outcomes.

Recommendation 9. Research. Increase the evidence base and promote the use of the evidence to improve preconception health.

Recommendation 10. Monitoring Improvements. Maximize public health surveillance and related research mechanisms to monitor preconception health.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is not specifically stated.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Improved knowledge and attitudes and behaviors of men and women related to preconception health
- Assurance that all women of childbearing age in the United States receive preconception care services (i.e., evidence-based risk screening, health promotion, and interventions) that will enable them to enter pregnancy in optimal health
- Reduction in the risks indicated by a previous adverse pregnancy outcome through interventions during the interconception period, which can prevent or minimize health problems for a mother and her future children
- Reduction in the disparities in adverse pregnancy outcomes

POTENTIAL HARMS

Not stated

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Each recommendation is accompanied by a series of specific action steps and, when implemented, can yield results within 2 to 5 years. Based on implementation of the recommendations, improvements in access to care, continuity of care, risk screening, appropriate delivery of interventions, and changes in health behaviors of men and women of childbearing age are expected to occur.

Recommendation 1 Preconception Health Action Steps:

- Develop, evaluate, and disseminate reproductive life planning tools for women and men in their childbearing years, respecting variations in age; literacy, including health literacy; and cultural/linguistic contexts.
- Conduct research leading to development, dissemination, and evaluation of individual health education materials for women and men regarding preconception risk factors, including materials related to biomedical, behavioral, and social risks known to affect pregnancy outcomes.

Recommendation 2 Preconception Health Action Steps:

- Develop, evaluate, and disseminate age-appropriate educational curricula and modules for use in school health education programs.
- Integrate reproductive health messages into existing health promotion campaigns (e.g., campaigns to reduce obesity and smoking).
- Conduct consumer-focused research to identify terms that the public understands and to develop messages for promoting preconception health and reproductive awareness.
- Design and conduct social marketing campaigns necessary to develop messages for promoting preconception health knowledge and attitudes, and behaviors among men and women of childbearing age.
- Engage media partners to assist in depicting positive role models for lifestyles that promote reproductive health (e.g., delaying initiation of sexual activity, abstaining from unprotected sexual intercourse, and avoiding use of alcohol and drugs).

Recommendation 3 Preconception Health Action Steps:

- Increase health provider (including primary and specialty care providers) awareness regarding the importance of addressing preconception health among all women of childbearing age.
- Develop and implement curricula on preconception care for use in clinical education at graduate, postgraduate, and continuing education levels.
- Consolidate and disseminate existing professional guidelines to develop a recommended screening and health promotion package.
- Develop, evaluate, and disseminate practical screening tools for primary care settings, with emphasis on the 10 areas for preconception risk assessment (e.g., reproductive history, genetic, and environmental risk factors).
- Develop, evaluate, and disseminate evidence-based models for integrating components of preconception care to facilitate delivery of and demand for prevention and intervention services.
- Apply quality improvement techniques (e.g., conduct rapid improvement cycles, establish benchmarks and brief provider training, use practice self-audits, and participate in quality improvement collaborative groups) to improve provider knowledge and attitudes, and practices and to reduce missed opportunities for screening and health promotion.
- Use the federally funded collaboratives for community health centers and other Federally Qualified Health Centers to improve the quality of preconception risk assessment, health promotion, and interventions provided through primary care.
- Develop fiscal incentives for screening and health promotion.

Recommendation 4 Preconception Health Action Steps:

- Increase health provider (including primary and specialty care providers) awareness concerning the importance of ongoing care for chronic conditions and intervention for identified risk factors.
- Develop and implement modules on preconception care for specific clinical conditions for use in clinical education at graduate, postgraduate, and continuing education levels.
- Consolidate and disseminate existing guidelines related to evidence-based interventions for conditions and risk factors.

- Disseminate existing evidence-based interventions that address risk factors that can be used in primary care settings (i.e., iotretinoins, alcohol misuse, antiepileptic drugs, diabetes [preconception], folic acid deficiency, hepatitis B, human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), hypothyroidism, maternal phenylketonuria [PKU], rubella seronegativity, obesity, oral anticoagulant, sexually transmitted disease (STD), and smoking).
- Develop fiscal incentives (e.g., pay for performance) for risk management, particularly in managed care settings.
- Apply quality improvement techniques and tools (e.g., conduct rapid improvement cycles, establish benchmarks, use practice self-audits, and participate in quality improvement collaborative groups).

Recommendation 5 Preconception Health Action Steps:

- Monitor the percentage of women who complete postpartum visits (e.g. using the Health Employer Data and Information Set measures for managed care plans and Title V Maternal Child Health Block Grant state measures), and use these data to identify communities of women at risk and opportunities to improve provider follow-up.
- Develop, evaluate, and replicate intensive evidence-based interconception care and care coordination models for women at high social and medical risk.
- Enhance the content of postpartum visits to promote interconception health.
- Use existing public health programs serving women in the postpartum period to provide or link to interventions (e.g., family planning, home visiting, and the Special Supplemental Nutrition Program for Women, Infants, and Children).
- Encourage additional states to develop preconception health improvement projects with funds from the Title V Maternal Child Health Block Grant, Prevention Block Grant, and similar public health programs.

Recommendation 6 Preconception Health Action Steps:

- Consolidate existing professional guidelines to develop the recommended content and approach for such a visit.
- Modify third party payer rules to permit payment for one prepregnancy visit per pregnancy, including development of billing and payment mechanisms.
- Educate women and couples regarding the value and availability of prepregnancy planning visits.

Recommendation 7 Preconception Health Action Steps:

- Improve the design of family planning waivers by permitting states (by federal waiver or by creating a new state option) to offer interconception risk assessment, counseling, and interventions along with family planning services. Such policy developments would create new opportunities to finance interconception care.
- Increase health coverage among women who have low incomes and are of childbearing age by using federal options and waivers under public and private health insurance systems and the State Children's Health Insurance Program.

- Increase access to health-care services through policies and reimbursement levels for public and private health insurance systems to include a full range of clinicians who care for women.

Recommendation 8 Preconception Health Action Steps:

- Use federal and state agency support to encourage more integrated preconception health practices in clinics and programs.
- Provide support for Centers for Disease Control and Prevention (CDC) programs to develop, evaluate, and disseminate integrated approaches to promote preconception health.
- Analyze and evaluate the preconception care activities used under the federal Healthy Start program, and support replication projects.
- Convene or use local task forces, coalitions, or committees to discuss opportunities for promotion and prevention in preconception health at the community level.
- Develop and support public health practice collaborative groups to promote shared learning and dissemination of approaches for increasing preconception health.
- Include content related to preconception care in educational curricula of schools of public health and other training facilities for public health professionals.

Recommendation 9 Preconception Health Action Steps:

- Prepare an updated evidence-based systematic review of all published reports on science, programs, and policy (e.g., through the Agency for Healthcare Research and Quality).
- Encourage and support evaluation of model programs and projects, including integrated service delivery and community health promotion projects.
- Conduct quantitative and qualitative studies to advance knowledge of preconception risks and clinical and public health interventions, including knowledge of more integrated practice strategies and interconception approaches.
- Design and conduct analyses of cost-benefit and cost-effectiveness as part of the study of preconception interventions.
- Conduct health services research to explore barriers to evidence-based and guidelines-based practice.
- Conduct studies to examine the factors that results in variations in individual use of preconception care (i.e., barriers and motivators that affect health-care use).

Recommendation 10 Preconception Health Action Steps:

- Apply public health surveillance strategies to monitor selected preconception health indicators (e.g., folic acid supplementation, smoking cessation, alcohol misuse, diabetes, and obesity).
- Expand data systems and surveys (e.g., the Pregnancy Risk Assessment and Monitoring System and the National Survey of Family Growth) to monitor individual experiences related to preconception care.

- Use geographic information system techniques to target preconception health programs and interventions to areas where high rates of poor health outcomes exist for women of reproductive age and their infants.
- Use analytic tools (e.g., Perinatal Periods of Risk) to measure and monitor the proportion of risk attributable to the health of women before pregnancy.
- Include preconception, interconception, and health status measures in population-based performance monitoring systems (e.g., in national and state Title V programs).
- Include a measure of the delivery of preconception care services in the Healthy People 2020 objectives.
- Develop and implement indicator quality improvement measures for all aspects of preconception care. For example, use the Health Employer Data and Information Set measures to monitor the percentage of women who complete preconception care and postpartum visits or pay for performance measures.

IMPLEMENTATION TOOLS

Staff Training/Competency Material

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Johnson K, Posner SF, Biermann J, Cordero JF, Atrash HK, Parker CS, Boulet S, Curtis MG, CDC/ATSDR Preconception Care Work Group, Select Panel on Preconception Care. Recommendations to improve preconception health and health care--United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. MMWR Recomm Rep 2006 Apr 21;55(RR-6):1-23. [195 references] PubMed

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006 Apr 21

GUIDELINE DEVELOPER(S)

Centers for Disease Control and Prevention - Federal Government Agency [U.S.]

SOURCE(S) OF FUNDING

United States Government

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CDC/ATSDR Preconception Care Work Group

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The Centers for Disease Control and Prevention (CDC), their planners, and their content experts wish to disclose they have no financial interests or other relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from the Centers for Disease Control and Prevention (CDC) Web site:

- HTML Format
- Portable Document Format (PDF)

Print copies: Available from the Centers for Disease Control and Prevention, MMWR, Atlanta, GA 30333. Additional copies can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325; (202) 783-3238.

AVAILABILITY OF COMPANION DOCUMENTS

Continuing Education activity is available from the Centers for Disease Control and Prevention (CDC) Web site.

PATIENT RESOURCES

None available

NGC STATUS

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